

George C. Marshall Space Flight Center Marshall Space Flight Center, Alabama 35812

# ORGANIZATIONAL INSTRUCTION

# Flight Projects Directorate Ground Systems Department FD40

# Macro Flow for Ground Systems Operations

# **Revision A**

# **APPROVAL**

NAME Original Signed by

Manager, Ground FD40 March 14, 2001
Systems Department

Ann R. McNair

CHECK THE MASTER LIST
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

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# **DOCUMENT HISTORY LOG**

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		9/14/99	Baseline version
Revision	Rev. A	3/14/01	Document reformatted to Flight Projects Directorate standard template.

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#### 1.0 GENERAL INFORMATION

#### 1.1 Scope

This instruction provides the overall operations flow for all activities in the Ground Systems Department.

### 1.2 Purpose

The purpose of this instruction is to provide an overall process related to systems that are designed, developed, and/or operated by the Ground Systems Department.

## 1.3 Applicability

This instruction is applicable to all civil service and on-site contractor personnel who support the Ground Systems Department of the Flight Projects Directorate (FPD).

#### 2.0 APPLICABLE DOCUMENTS

FPD-OI-FD40.4 Flight Certification for Ground Systems

FPD-OI-FD40.10 HOSC Problem Report

FPD-OI-FD43.1 Ground Systems Operations

MPG 1230.1 Center Resources Management Process (currently in review)

NPG 1441.1 Records Retention Schedules

#### 3.0 ACRONYMS and DEFINITIONS

#### 3.1 Acronyms

CWC Collaborative Work Commitment

FD43 Mission Systems Operations Group

FPD/FD Flight Projects Directorate

HOSC Huntsville Operations Support Center

ISS International Space Station

IST Integrated Support Team

UMS Utilization & Mission Support

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#### 3.2 Definitions

<u>Collaborative Work Commitment</u> A Collaborative Work Commitment is a document that defines the tasks and resources required to accomplish in-house work for the next fiscal year and represents proof of commitment by the Project Manager, Task Manager, and Supporting Organizations to provide the resources.

#### 4.0 INSTRUCTIONS

#### 4.1 System Concept

Using data and requirements from the Collaborative Work Commitment (CWC) and applicable Systems & Operation Requirements Documentation, a system design analysis is performed and a concept developed.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead

#### 4.2 Ground System Design and Development

The ground systems elements needed to support the concept are designed and developed.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead

#### 4.3 Flight Readiness Certification

Flight readiness reviews and certification are conducted. This generates a Record of Certification.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead Manager, Ground Systems Department

#### **4.4 Ground Systems Operations**

Once the ground systems design and development have been certified as flight ready, operations are begun.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead

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#### 4.5 Post-Activity Debrief

Following operations utilization, a post-activity debrief is conducted to assess success, identify problems encountered, and determine the need for corrective action. This generates a Record of Debrief.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead Manager, Ground Systems Department

#### 4.6 Customer Feedback

After the post-activity debrief, customer feedback is sought and incorporated where possible in future activities to enhance service and promote continuous improvement.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead

#### 4.7 Self-Assessment

Finally, a self-assessment is conducted by the Ground Systems Department participating in the activity to assess activity success and needs for future improvements.

RESPONSIBLE PARTIES: Mission Systems Development Group Lead

Mission Systems Support Group Lead Mission Systems Operations Group Lead Manager, Ground Systems Department

#### 5.0 NOTES

When support is requested from or provided to another organization, Collaborative Work Commitments (CWC's) are developed between the Managing Organization and the Performing Organization for the products and services required. CWC's only cover tasks within MSFC, but the cooperating organizations may be either internal or external to the Flight Projects Directorate. The CWC's are developed in accordance with MPG 1230.1, "Center Resources Planning Process" (currently in review), which covers the CWC process in detail.

#### 6.0 SAFETY PRECAUTIONS AND WARNING NOTES

None

#### 7.0 APPENDICES, DATA, REPORTS, AND FORMS

None

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# 8.0 QUALITY RECORDS

The Quality Records for this Organizational Instruction are given in the table below.

Record Title	Description of Record	Authority	Retention	Notes
Record of Certification	Signed statement that the given GSD element is ready for flight. GSD DM concurs.	FPD-OI-FD40.4	Retain for 2 years after project completion.	Access in non-restricted.  Storage is in a file cabinet in MSFC Building 4663, Room
				A-179.
Record of	See Authority.	FPD-OI-FD43.1	Retain for 5 years	See Authority.
Debrief				

# 9.0 TOOLS, EQUIPMENT, AND MATERIALS

None

## 10.0 PERSONNEL QUALIFICATION, TRAINING, AND CERTIFICATION

None

#### 11.0 FLOW DIAGRAM

The following diagram graphically depicts the process described in Section 4.0 of this document.

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FIGURE 1: Macro Flow for Ground Systems Department of FPD

